

REMARKS

Introduction

Claims 1 – 18 were originally pending in this case. Claims 1 – 10 have been cancelled. Claims 11, 13 – 18 have been amended. Thus, Claims 11 – 18 remain in this application.

Claim Rejections

Claims 11 – 18 were finally rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 11 – 13 and 15 were finally rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. patent application publication 2003/0066708 to Allison et al. (the Allison et al. ‘708 application). Claims 11 – 13, 15 and 17 were finally rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. patent 4,828,910 to Haussling (the Haussling ‘910 patent). Claims 18 was finally rejected under 35 U.S.C. § 103(a) as being unpatentable over the Haussling ‘910 patent as applied to claim 11. Additionally, claims 14 and 16 were finally rejected under 35 U.S.C. § 103(a) as being unpatentable over the Allison et al. ‘708 application, as applied to claim 11, and further in view of U.S. patent 4,873,045 to Fujita et al. (the Fujita et al. ‘045 patent).

As explained in greater detail below, applicants respectfully submit that these issues noted by the Examiner have been addressed. More specifically, Independent claim 11 has been amended to more particularly describe the present invention. Claims 12 – 13, 15 and 17 are ultimately dependent upon independent claim 11. In view of the amendments as explained in greater detail below, applicants respectfully submit that each and every limitation of the independent claims in this case cannot be found in either the Allison et al. ‘708 application or the Haussling ‘910 patent. Accordingly, these rejections are respectfully traversed.

The Prior Art

The Allison et al. ‘708 Application

The Allison et al. ‘708 application discloses four methods for manufacturing sound attenuating composite articles for use in automotive applications (Illustrated schematically in FIGS. 5A-5D). All of the four methods disclose providing a first layer of material (12), such as sheet foam urethane or polyethylene, and extruding thermoplastic material thereon to form a second layer (14) that is fused to the first layer (12), and then applying another thermoplastic material to form the third layer (16) that is fused to the second layer (14). The second layer (14) and the third layer (16) are **both thermoplastic materials**. (¶¶ [0028]-[0030]). Only two of the methods disclosed in the ‘708 application include providing a fourth layer (18), which is *either* a scrim material **or** a shoddy material. (¶¶ [0032] and [0035]). Each of these two methods include the additional steps of compression via nip rollers and compression via a heated mold. (¶¶ [0053] – [0056] and [0062] – [0064]).

The Allison et al. ‘708 application does not disclose or suggest a method of manufacturing a composite shoddy that includes **both** an organic base material that defines a shoddy bottom layer **and** a scrim material that defines a scrim top layer where a mastic middle layer is disposed therebetween, as described in independent claim 11, as amended.

The Haussling ‘910 Patent

The Haussling ‘910 patent discloses a sound absorbing laminate (10) for use as an automobile headliner and method of making the same. More specifically, the ‘910 patent discloses a method wherein a nonwoven fibrous core (3), coated with binder resin, is sandwiched between two thin, nonextendable, porous reinforcing mats (2 and 4). (Column 3, lines 11-22; Column 3 line 55-

Column 4, line 27). After a predetermined drying time, the mats (2 and 4) are impregnated with a polyurethane elastomer that extends into a portion of the fibrous core (3). Subsequently, a decorative cover layer (1) is applied to the mat (2) and a release layer is applied to the mat (4) to form the laminate (10). The laminate (10) is then passed through a set of rollers and then introduced into a heated mold having a predetermined geometrical configuration to produce the shape of configured part (20). (FIG. 2).

The Haussling '910 patent does not disclose or suggest a method of manufacturing a composite shoddy that employs a *mastic middle layer* sandwiched between an organic base material that defines a shoddy bottom layer and a scrim material that defines a scrim top layer, as described in independent claim 11, as amended.

The Fujita et al. '045 Patent.

The Fujita et al. '045 patent discloses a method for manufacturing an automotive interior component such as a door trim, rear side trim, or rear parcel shelf. The method includes providing a skin layer (50) and a cushioning layer (51) attached thereto within a mold (40) (FIG. 2). Extruded thermoplastic material is introduced to the mold and bonded to the cushioning layer (51). When cured, the thermoplastic material forms a rigid interior trim component for automotive applications where the skin layer (50) is visible from the interior of a vehicle. (FIG. 4).

The Fujita et al. '045 patent does not disclose or suggest a method of manufacturing a composite shoddy that includes providing an organic base material that defines a shoddy bottom layer and a scrim material that defines a scrim top layer where a mastic middle layer is disposed therebetween where the scrim top layer is operatively engaged to the class-B side of a non-carpeted surface material, as described in independent claim 11, as amended.

The Present Invention

In contrast to that which is disclosed in the references of record in this case, the present invention as defined in independent claim 11 is directed toward a method of manufacturing a composite shoddy for use as underlayment for a surface material in automotive applications. The method includes providing an organic base material that defines a shoddy bottom layer having an engaging surface. The method further includes providing a mastic material that defines a mastic middle layer having a first surface and a second surface opposite the first surface. The engaging surface of the shoddy bottom layer is then bonded to the first surface of the mastic middle layer. The method further includes the step of providing a scrim material that defines a scrim top layer having a mastic contact surface and a receiving surface opposite the mastic contact surface wherein the receiving surface is adapted to operatively engage the class-B side of a non-carpeted surface material for use in automotive applications. The second surface of the mastic middle layer is then bonded to the mastic contact surface of the scrim top layer to form a tri-partite composite shoddy.

Argument

35 U.S.C. § 112

Claims 11-18 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants respectfully traverse this rejection. Where the term is defined within the specification, the applicant may act as his own lexicographer. Process Control Corp. v. HydReclain Corp., 190 F.3d 1350, 1357; 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). Here, applicants respectfully submit that the expression “mastic layer” as used in the present application is defined in the specification as, “constructed from a mastic material having a primarily bituminous substance” and is

further defined within the specification as a layer that has, “a predetermined density greater than the density of the organic bottom layer 38 and provides vibration dampening to improve vehicle interior acoustics as well as to block exterior noise from entering the vehicle interior 14 through the organic bottom layer.” (¶[0024]). Furthermore, this expression has been used in prior patents in the related art. (See, e.g., U.S. Patent No. 4,456,705.). Additionally, the expression “shoddy” as used in the claims must also be interpreted in light of the specification. The “shoddy” is defined throughout paragraphs 3 and 21 of the application.

Thus, it is respectfully submitted that the terms “mastic layer” and “shoddy” have been adequately described in the specification and are not indefinite. Accordingly, applicants respectfully submit that claims 11-18, as amended, distinctly point out the components used in each step that make up a flexible, tri-partite composite shoddy for use as a substrate under a non-carpeted surface material in automotive applications. For these reasons, applicants respectfully submit that the present application complies in all respects with the requirements of § 112.

35 U.S.C. § 102

Claims 11-13 and 15 were rejected under 35 U.S.C. § 102(a) as being anticipated by the Allison et al. ‘708 application and claims 11 – 13, 15 and 17 were rejected under § 102(a) as being anticipated by the Haussling ‘910 patent. Applicants respectfully submit that the method of manufacturing a composite shoddy defined in claims 11-13, 15 and 17 is not disclosed or suggested by either the Allison et al. ‘708 application or the Haussling ‘910 patent. The Allison et al. ‘708 application discloses providing *either a scrim or a shoddy* and requires the limitation of compressing the scrim or shoddy and thermoplastic layers together to facilitate bonding therebetween. The Haussling ‘910 patent *does not disclose a mastic middle layer*, but rather teaches

providing a fibrous core sandwiched between two, non-extendable, fibrous reinforcing mats methods and impregnating these layers with a resin where the scrim layer is furthest away from the B-side of a surface material. In contrast to these cited references, the present invention includes the limitations of providing mastic middle layer that is primarily bituminous and a scrim top layer to operatively engage the B-side of a non-carpeted surface material.

Neither the Allison et al. '708 application nor the Haussling '910 patent disclose or suggest a method of manufacturing a tri-partite composite shoddy including the steps of providing a shoddy bottom layer and a scrim top layer and a mastic middle layer disposed therebetween. Furthermore, neither the Allison et al. '708 application nor the Haussling '910 patent disclose or suggest the steps of providing a scrim top layer that is adapted to operatively engage the B-side of a non-carpeted surface material for use in automotive applications, as required in independent claim 11, as amended. Accordingly, applicants respectfully submit that the structure required by newly amended independent claim 11 as discussed above cannot be found in either the Allison et al. '708 application or the Haussling '910 patent. Claims 12-18 are each ultimately dependent upon independent claim 11. It is respectfully submitted that the disclosures of the Allison et al. '708 application and the Haussling '910 patent do not anticipate the invention as defined in these claims. For these reasons, applicants respectfully request that the rejection under § 102 be withdrawn.

35 U.S.C. § 103

A rejection based on §103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the present invention from the prior art. Furthermore, obviousness is not established by combining the basic disclosures of the prior art to produce the claimed invention absent a teaching or suggestion that the combination be made. Interconnect

Planning Corp. v. Fiel, 774 F.2d 1132, 1143, 227 U.S.P.Q. (BNA) 543, 551 (Fed. Cir. 1985); In re Corkhill, 771 F.2d 1496, 1501-02, 226 U.S.P.Q. (BNA) 1005, 1009-10 (Fed. Cir. 1985). The test for combining references is what the combination of disclosures, taken as a whole, would have suggested to one of ordinary skill in the art. In re Simon, 174 U.S.P.Q. (BNA) 114 (CCPA 1972). Thus, it is not sufficient for an examiner merely to state that one cited reference teaches several of the limitations of a claim and another teaches several other limitations of a claim to support a rejection based on obviousness. As the Court of Appeals for the Federal Circuit has noted in the past, “[w]hen a rejection depends upon a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references.” Ecolochem, Inc. v. Southern Calif. Edison, 56 U.S.P.Q. 2d 1065, 1073 (Fed. Cir. 2000). Specifically, the Examiner must show that a person of ordinary skill in the art must not only have had some motivation to combine the prior art teachings, but some motivation to combine the prior art teachings *in the particular manner claimed*. In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) (emphasis added).

Here, there is simply no motivation to combine the Allison et al. ‘708 application with the Haussling ‘910 patent or the Fujita et al. ‘045 patent. Moreover, there is no motivation to combine these prior art references in the manner claimed by the present invention. Even assuming that such a motivation existed, a combination of these references would not result in the method of manufacturing a tri-partite composite shoddy of the type described in independent claim 11, as amended.

Rather, the Allison et al. ‘708 application in connection with either the Haussling ‘910 patent or the Fujita et al. ‘045 patent skirt around, but do not suggest the claimed invention *as a whole*. See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1383 (Fed. Cir. 1986). Specifically, the Allison et al. ‘708 application discloses a method that does not employ a scrim top layer *and a*

shoddy bottom layer, but rather, teaches that only one of these articles may be employed. On the other hand, the Haussling ‘910 patent teaches away from the Allison et al. ‘708 application by advocating a method of manufacturing that includes providing a fibrous core disposed between two reinforcing mats and impregnating these layers with a resin. Furthermore, where the Haussling ‘910 patent discloses a scrim material, it teaches providing this component furthest away from the B-side of the surface material. Accordingly, the teachings these diametrically opposed references would have to be reconstructed or rearranged to change their operations if they were to be combined.

There is a fundamental axiom in patent law that if a reference must be reconstructed or rearranged to change its operation to meet the applicant’s claim, that modification of the reference is inappropriate and cannot stand. It is respectfully submitted that the Examiner is picking and choosing elements from the dissimilar methods disclosed in the Allison et al ‘708 application and the Haussling ‘910 patent and combining these elements by restructuring them, using hindsight and the applicants’ own disclosure, to conclude that the claimed invention is obvious.

Neither the Allison et al. ‘708 application nor the Haussling ‘910 patent teach or suggest a method of manufacturing a composite shoddy including the steps of providing a shoddy bottom layer, a mastic middle layer and a scrim top layer where the mastic middle layer is disposed between the shoddy bottom layer and the scrim top layer to define a tri-partite shoddy where the scrim top layer is adapted to operatively engage the B-side of a non-carpeted surface material in an automotive application, as required independent claim 11, as amended. The known prior art fails to disclose or suggest any structure which can serve as the scrim top layer in the manner required by the claims in this case.

Furthermore, none of these references relied upon the Examiner has anything to do with the problems solved by the present invention as discussed in greater detail in Pages 1-4 of applicants’

specification. Specifically, neither the Allison et al. ‘708 application nor the Haussling ‘910 patent teach or suggest the a method of manufacturing a composite shoddy that eliminates the need for a release liner; accommodates for post-processing material shrinkage when secured to non-carpeted surface material; and enables in-mold bonding to the B-side of a surface material. Thus, applicants respectfully submit that the disclosures of each of these references would have to be improperly modified to meet the limitations of independent claim 11, as amended.

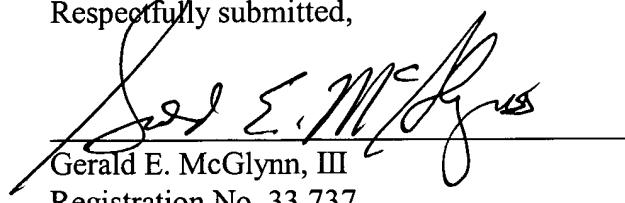
Claims 12-18 are ultimately dependent upon independent claim 11 and add further perfecting limitations which cannot be found in, nor are they suggested by, the Fujita et al. ‘045 patent, which discloses a method of manufacturing a rigid substrate interior trim component, or the remaining prior art references. However, even if they did, they could only be applied through hindsight after restructuring the disclosure of the prior art in view of applicants’ invention. A combination of the prior art in this way to derive applicants’ invention would, in and of itself, be an invention.

Conclusion

Applicants respectfully submit that the amendment made herein complies with the requirements of form expressly set forth in the previous office action and otherwise present this application in better form for consideration on appeal. Accordingly, applicants respectfully request that the rejections previously advanced be withdrawn.

Finally, applicants respectfully maintain that the claim, as amended, clearly distinguishes over the prior art and is therefore allowable. Accordingly, applicants respectfully solicit the allowance of claims 11 – 18 pending in this case.

Respectfully submitted,



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